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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,487	12/04/2003	Ramgopal Vissa	2945.004US1	7523
21186	7590	12/10/2010	EXAMINER	
SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			PAIK, SANG YEOP	
			ART UNIT	PAPER NUMBER
			3742	
			NOTIFICATION DATE	DELIVERY MODE
			12/10/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com  
request@slwip.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/726,487	<b>Applicant(s)</b> VISSA ET AL.	
	<b>Examiner</b> SANG Y. PAIK	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 14 October 2010.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 12-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 12-20 and 22-28 is/are rejected.
- 7)  Claim(s) 21 is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \*    c)  None of:
1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 17 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 17, the apparatus as originally disclosed does not comprise a convective heating element or how such convective heating generator is structured with the apparatus. Claim 18 recites a means to introduce a convective ionized gas to the apparatus but there is no such means is disclosed in the disclosure.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 12, 14-16 and 25 are rejected under 35 U.S.C. 102(e) as being b by Swanson (US 2004/0252505).

Swanson shows the structure and method claimed including infrared heating modules (28, 30), each module is joined to a rotation point (84, 86) that rotates 360 degree with a flexible (38) that allows for a 180 degree rotation wherein the infrared modules are directed to a given surface

With respect to claims 14-16, Swanson which shows all the recited heating elements meets the apparatus being a die heater, paper dyer, or paint remover.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13, 19 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (US 2004/0252505) in view of Chapman, Jr et al (US 3,694,647).

Swanson shows the structure claimed except for an adjustable frame.

Chapman shows an adjustable frame with swivel joints that allows the frame to be expanded or contracted in parallel to a heater relative to the frame and allowing the frame with multiple adjustable positions (also see Figure 6).

In view of Chapman, it would have been obvious to one of ordinary skill in the art to adapt Swanson with the frame that is adjustable with swivel points to further allow the frame to position the infrared heaters at desired angular positions including parallel to the heaters.

With respect to claim 22, Swanson shows the heaters attached on the frame (12, 16) wherein the drawing Figure 1 shows having the heaters on opposite sides, as being the front and rear/back sides, of the frame when viewed by its profile as shown in the figure.

7. Claims 20 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson in view of Chapman as applied to claims 13, 19 and 22-24 as above, and further in view of Cekic et al (US 7,697,971) or Robinson (US 4,366,411).

Swanson in view of Chapman shows the structure claimed except for the heater being a 2 kilowatt infrared heater.

Cekic or Robinson shows it is known in the art that an infrared heater having at least two kilowatt infrared heater lamps is well known.

In view of Cekic or Robinson, it would have been obvious to one of ordinary skill in the art to adapt Feyrer, or Swanson as modified by Chapman, with the infrared heaters having 2 kilowatt infrared heaters or any desired heating capacity that would meet desired applications by the user.

With respect to claims 26-28, Cekic shows that the radiation heating source is used for curing or manufacturing of printed circuits wherein a circuit board is irradiated to remove material therefrom. Thus, it would have been obvious to one of ordinary skill

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in the art to adapt Swanson as modified by Cekic to heat any given surfaces including the dies, painted surface, or paper to provide an infrared heat as desired.

***Allowable Subject Matter***

8. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments filed 10/14/10 have been fully considered but they are not persuasive. The applicant argues Swanson does not provide any reference to "heat," "radiation," and "infrared." The applicant further argues while Swanson mentions halogens, incandescent and fluorescent lamps or light bulbs, they are for providing luminance and not in connection with heat. This argument is not deemed persuasive since it is generally known that incandescent lamps generate heat (see attached Wikipedia definition). With respect to Chapman, it is applied to show that the swivel points (140 and 142) allow the frame to expand and contract the lamp head/shade (134) relative to the frame and allow varying positional angles. In order to also adjust the angular positions, it would have been obvious to one of ordinary to adapt Swanson, which is in the same field of endeavor to also allow varying angular positions with an adjustable frame.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG Y. PAIK whose telephone number is (571) 272-4783. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANG Y PAIK/

Primary Examiner, Art Unit 3742